Reply to Office Action of September 20, 2007

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently amended): A process for the preparation of aerogels comprising,

a) exchanging the liquid phase of an aquagel with xenon to form a xenongel; and

b) extracting xenon from the xenongel xenon exchanged aquagel of step a) under

hypercritical or supercritical drying conditions of xenon; and

c) optionally, recovering xenon from step b).

Claim 2 (Currently amended): A process for the preparation of aerogels according to claim 1,

further comprising, prior to step a), forming an aquagel from a suitable precursor under conditions

suitable for hydrolysis/condensation.

Claim 3 (Currently amended): A process for the preparation of aerogels according to claim 2,

wherein the suitable precursor is an alkoxyde alkoxide having the formula:

 $X-Me(OR)_{n-1}$

in which Me is a metal belonging to the 3rd, 4th and 5th Groups of the Element Periodic Table; n is

integer and represents the valence of Me; X is either -OR or -R where-OR is an alkoxyde alkoxide

group and -R is an organic radical, linear or branched, having up to 10 carbon atoms.

Claim 4 (Previously presented): A process for the preparation of aerogels according to claim 3

wherein the suitable precursor is tetramethoxysilane or tetraethoxysilane.

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Claim 5 (Previously presented): A process for the preparation of aerogels according to claim 3

wherein hydrolysis is in presence of an acid selected from hydrochloric, nitric or acetic acid.

Claim 6 (Currently amended): A process for the preparation of aerogels comprising

a) forming an aquagel from a suitable precursor under suitable conditions for

hydrolysis/condensation;

b) exchanging the liquid phase of an aquagel with liquid xenon;

c) extracting xenon from the aquagel of step b) under supercritical conditions of xenon; and

d) optionally, recovering xenon from step c).

Claim 7 (Previously presented): A process for the preparation of aerogels according to claim 6

wherein the exchange is carried with liquefied xenon at temperature between 0 and 16.6°C.

Claim 8 (Previously presented): A process for the preparation of aerogels according to claim 6

wherein the super critical conditions include a temperature higher than 16.6°C.

Claim 9 (Previously presented): A process for the preparation of aerogels according to claim 6

wherein the super critical conditions include a pressure higher than 58.4 bar.

Claim 10 (Previously presented): A process for the preparation of aerogels according to claim 1

comprises recovering xenon at the end of the extraction.

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